

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

May 26, 2001

**Systems Group Chairman's Factual Report Addendum Regarding the
Examination of Wreckage Recovered During All Recovery Efforts**

DCA-00-MA-006

A. ACCIDENT

Operator: EgyptAir
Location: 60 Miles Southeast of Nantucket Island (N40.20, W69.45)
Date: October 31, 1999
Time: 0148 EST
Airplane: Boeing 767-366ER, SU-GAP

B. SYSTEMS GROUP

Chairman:

Scott Warren, NTSB
Aerospace Engineer

Members:

Hani Salaheldin,
EgyptAir

Mohamed El-Bakery,
EgyptAir

David Blanchet,
Boeing

C. SUMMARY

About 0150 eastern standard time (EST), on October 31, 1999, a Boeing 767-366ER, SU-GAP, operated by EgyptAir, as flight 990, crashed into the Atlantic Ocean about 60 miles south of Nantucket, MA. EgyptAir flight 990 was being operated under the provisions of Egyptian Civil Aviation Regulations Part 121 and United States Title 14 Code of Federal Regulations Part 129 as a scheduled, international flight from John F. Kennedy Airport (JFK), New York, New York to Cairo International Airport in Cairo, Egypt. The flight departed JFK about 0122 EST, with 4 flightcrew members, 10 flight attendants, and 203 passengers on board. There were no survivors. The airplane was destroyed by impact forces. Floating debris from the aircraft was recovered on the morning of October 31, 1999.

D. DETAILS OF THE INVESTIGATION

The Systems Group met at Quonset Point, Rhode Island during the period of October 17-21, 2000. During that time the group examined all of the aircraft wreckage that was stored in the hanger with the exception of several bags that contained foam, items from the cabin interior, and passenger personal effects. Items that could be identified as being part of the longitudinal control system were pulled aside. All of these items were badly damaged, and consisted of that item and only small amounts, if any, of attached structure. Items identified were as follows:

- a. 2 – Elevator Interconnect Linkages (used to connect the inboard and outboard elevator segments);
- b. 1 – Lower Bracket for Left Aft Torque Tube (elevator),
P/N (part number): 251T2333-3;
- c. 2 – Elevator Hinge, Multi-position, P/N: 183T1302-1;
- d. 1 – Elevator Hinge Assembly, Station 90.96, Left Hand Side,
P/N: 183T1423-1;
- e. 1 – Hanger Link Assembly for Elevator,
P/N: 252T2172-1;
- f. 7 – Sections of Elevator Structure, the pieces were identified as follows:
 - 1) Piece was 51 inches long at the trailing edge, upper panel had the P/N 183T3072-1, S/N (serial number) 233 – This part number was identified as the upper panel, elevator bond assembly, outboard elevator. The piece was further identified as the furthest outboard section of the left elevator;

- 2) Piece was 31 inches long at the trailing edge;
- 3) Piece was 32.5 inches long at the trailing edge;
- 4) Piece was 38 inches long at the trailing edge;
- 5) Piece was 37.5 inches long at the trailing edge;
- 6) Piece was 21 inches long at the trailing edge;
- 7) Piece was 20 inches long at the trailing edge, one rib section had the P/N 183T3011-1, S/N (serial number) 453 – This part number was identified as the rib installation, outboard end of the outboard section of the elevator. The piece was further identified as the furthest outboard section of the right elevator.

g. 1 – Elevator Hinge Assembly, Left Hand Side, P/N: 183T3029-1.

Scott A. Warren
Aerospace Engineer